Independent Study Title	Relationship Between Cholesterol Crystal in Live Blood Analysis Method and Lipid Profile Levels
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ABSTRACT

The relationship between lipid profile level and cholesterol crystal in live blood analysis was studied in 235 healthy subjects, divided into 106 men and 129 women aged between 30 and 60 years, who conducted laboratory check-up. Lipid profiles were measured by using chemical reaction in semi-automated machine while cholesterol crystal in live blood analysis was counted under dark field microscope for 10 oil fields. From the results, there was no correlation among socioeconomic factors, total cholesterol level, triglyceride level, HDL-C level, and LDL-C level. However, the results showed significant correlation between cholesterol crystal and type of food ($p<0.05$). Healthy food was different from unhealthy food ($p<0.05$) and, in the same way, unhealthy food was different from general food ($p<0.05$) whereas general food and healthy food were unaltered. The results also showed that cholesterol crystal was detected in live blood analysis when the subject usually consumed fatty meals or their body had poor digestion of fat. These preliminary data suggested that unhealthy food and cholesterol crystal in blood stream might play the important role in the aging process and chronic and degenerative diseases.

Keywords: Live blood analysis/Cholesterol crystal/Lipid profile/Dark field microscope